

AMENDMENTS TO THE SPECIFICATION:

Please amend the paragraph beginning at page 1, line 14, as follows:

In ~~particularly~~particular, but not exclusively, the search system and method uses a permanent identity such as Session Initiation Protocol (SIP) User Resource Identifier (URI), to retrieve data from a distributed computer system to enable a search result to be sent to the user even if the initial search session has terminated. The data sent and retrieved may have a specific purpose, for example, it may enable data related to one or more items or services to be searched for, and the results may be presented in a form facilitating the purchase of one or more items or services such as is described in the inventors copending International Patent Application PCT/GB2004/004160 entitled “DATA RETRIEVAL SCHEME” ~~patent application GB-A-~~
~~0322880, entitled “PURCHASING SCHEME”, the contents of which are hereby incorporated into this description by reference.~~

Please amend paragraph at page 2, line 4, as follows:

A search entered on a conventional search site usually has to generate at least one search result within a specific period of time or the search site will display a negative search result to ~~the~~the user of the search engine. There is no mechanism to accommodate complex searches or to provide a search storage facility so that a user may in fact “log-of” the search site and retrieve their search results at a later point in time. The users of such search sites are effectively limited to the length of session that they can have with the search “server”.

Please amend paragraph at page 5, line 9, as follows:

Preferably, the user identity is associated with one or more static and/or dynamic addresses.

Examples of static/dynamic addresses include – an E164 address, ~~(please explain what this is/means)~~, an IP address, a telephone number for a facsimile, a pager number. Examples of a data source include any source of information which is available via the distributed computer system. The data source is preferably running the special search software (module #3) for greater functionality and better ~~optimisation~~optimization. In alternative embodiments the data source may comprise a web page.

Please amend paragraph beginning at page 5, line 31 through page 6, line 11, as follows:

The invention seeks to enable the search process to be performed more efficiently by including additional information provided by the user preferences in the search request and/or using additional information provided by the user preferences to remove less relevant search results which are returned to the enhanced SIP server prior to these results being forwarded to the user.

The invention thus enhances the RFC ~~(please define this)~~ functionality of the server software over the normal search software which a server may have. The search can be forwarded to the most appropriate user end terminal for the content of the search result. The search can also be forwarded to the user end terminal which the user is operating at the time the search result is forwarded. The SIP proxy server is able to store results which are received when an appropriate user end terminal cannot be identified as one which is being operated by the user. The SIP proxy server may then modify at least one search result or generate another form of notification to alert

the user to the search result and to indicate to the user how the user may retrieve the search result.

Please amend paragraph at page 7, line 11, as follows:

The best mode of the invention as currently contemplated by the inventor will now be described by means of specific embodiments of the invention. The best mode of the invention as currently contemplated by the inventors is supported by the session initiation protocol (SIP). SIP is the Internet Engineering Task Force's (IETF's) standard for multimedia conferencing over IP. SIP is an ASCII-based application-layer control protocol and is defined in RFC 2543, ~~a copy of which is filed herewith and~~ the contents of which are incorporated by reference.

Please amend paragraph beginning at page 7, line 30 through page 8, line 12, as follows:

Those skilled in the art will ~~recognise~~recognize that although the invention is described in the context of the SIP protocol as described in RFC 2543, the invention is not limited to the SIP protocol per se but extends to any protocols derived from the SIP protocol which support the SIP functionality used by the invention. For example, the invention can be implemented by any protocol which enables a proxy server to: locate the endpoints via address resolution, name mapping and call redirection; determine the media capability of an end point; determine the availability of an end point; establish a session; handle the transfer and termination of a call; and map an identity to a number of static and/or dynamic addresses, providing the protocol also enables a search session to be given a unique search identity by proxy server search software,

and providing the search is been initiated by a user registered with the proxy server and assigned
a unique user identity having the above properties, and providing the proxy server is able to
associate the user identity with one or more user preferences. These features of the protocol are
necessary to enable the proxy server to modify and/or filter the search query as appropriate and
to select a user end terminal to forward the results to in an appropriate format.

Please amend paragraph at page 9, line 18, as follows:

Referring now more specifically to Figure 1, two end terminals 10a, 10b shown by way of
example comprise a personal computer-type 10a and a mobile telephone type device -10b. End
terminals 10a, 10b are each capable of being connected independently to other elements in the
computer system, i.e., to the SIP proxy server 12 and to at least one data source 14. It will be
appreciated by those skilled in the art that the data source 14 from which or via which
information is retrieved does not need to be limited to the specific examples 14a, 14b, 14c shown
in Figure 1. In Figure 1, data source 14a comprises a web server, data source 14b comprises a
search engine (or database), and data source 14c comprises a phone terminal.

Please amend paragraph at page 10, line 8, as follows:

Although Google™ can be queried in a conventional way, Google may later provide an API
(application Programming Interface) which could enable more complex, enhanced or more
efficient SIP searches to take place. Alternatively, the proxy server 14 could ~~have processes~~
process a returned search result to determine that a specific web-site should be resent the search
request formatted in a specific way, for example a travel web-site for checking or booking

flights. Such a web-site may operate in a SIP-enabled or non-SIP enabled manner. As an example, in Figure 3, software module #3 comprises search database/engine software SDB which runs on the search server (equivalently known as the search engine) 14b.

Please amend paragraph at page 13, line 1, as follows:

The data source 14 then processes the search request to generate a search result which is conveyed as a search result message to the proxy server 12 in step 26. Depending on the type of data source, the search result may comprise a an audio file, for example, if the data source is 14c, the person answering the query may have their answer recorded as a voice-memo and stored in an audio format. The answer may however, be converted at some suitable point using speech to text technology to a text file, and the search result would then have a more conventional format.

Please amend paragraph beginning at page 13, line 32 through page 14, line 14, as follows:

As an example, if data source 14a returned a URL for a web-site for a travel company that has an on-line booking system, the SIP proxy server may already be aware of the format the on-line booking system would require to find out specific details of flights and would then provide information to enable the booking system form to be effectively filled in. Alternatively, the SIP server may interrogate the booking system to determine the information required. Once the SIP server has obtained a specific result which conforms with the user's search request to the level required (i.e., specific flight information has been obtained), the SIP server forwards this

information as a search result to the user. If the SIP server is aware that the user has frequent flyer miles or is a participant in another discount scheme (either as an individual, or if some ~~organisation~~organization the user is a member (and which is recorded in his user preferences) has a discount scheme), this information might also be submitted by the SIP server, so that the user is also given information on the price of a flight which takes his frequent flyer miles into account. In this way, the search results returned by the SIP server are much more relevant to the user. In a similar manner, car insurance sites, theatre ticket sites, etc., ~~and can~~all be further interrogated to get specific information relevant to the user's initial search enquiry.

Please amend paragraph beginning at page 14, line 26 through page 15, line 2, as follows:

Figure 4 shows an example of a SEDP, and is described in more detail later on, but in general a ~~an~~ search description protocol according to the invention will support one or more of the following characteristics:

Security (encryption);

User SIP id;

a variety of search descriptions fields (~~eg e.g.~~ XML/free text/keyword selection);

information on current session context (what user has been doing ~~eg e.g.~~ Email, how long connected, how long on current IP address,...); and

information on cached recent searches on terminal (~~eg e.g.~~ large files might be held on the terminal and should not be sent again).

Please amend paragraph at page 16, line 16, as follows:

For example, the SIP proxy server 12a may access database 12b to retrieve a set of at least one user preferences which ~~are~~is associated with the user's SIP identity, such as the user's hobbies, the user's search preferences, the user's past search results, the user's past user actions after search results, and the user's most frequently accessed web pages. These user preferences are then used to reconfigure the search request. The user preference information could be used by the SIP server to add supplementary search expressions which include negative search criteria. ~~For,~~for example, a user preference to indicate that unless expressly entered as key word, no results ~~should refer~~referring to a specific keyword should be included. In this way, a user can set a user preference for a keyword such as "Football" to not feature in any search results. The SIP server then can modify received search requests to automatically include in the search expression information equivalent to the ~~boolean~~Boolean expression "AND NOT football". The modified search expression then results in search results being returned to the user which exclude football-related information. This is advantageous as if the user's preferences indicate the user wishes to exclude search results for football related sites when a search is being performed over a communications information network such as the World Wide Web. ~~On~~On the internet, a search for "Manchester" for example, would not result in search results being forwarded to the user which referred to "Manchester city" or "Manchester United" or any other football related site which mentioned "Manchester".

Please amend paragraph beginning at page 18, line 24 through page 19, line 2, as follows:

When the SIP message carrying the search request is received by a data source 14, typically an information source such as a search server 14b, the message contents are extracted and are processed by the appropriate SIP software module located on the other server, e.g. the search engine SDB software module #3 located on the search engine of a search server. Alternatively, if the SIP server chooses another transport protocol, the message contents may be processed in the normal way (~~eg e.g.~~ Web form) for the site queried, for example, as would happen if a conventional search engine (i.e., non SIP enabled) were queried by the SIP proxy server 14, Also, if a SIP server 14 forwards the search request to a data source such as a mailing list or email address for a particular body or ~~organisation~~ organization of interest regarding the search request (whose addresses may have been located by earlier search requests by the user or provided by a preliminary search result generated by a conventional or SIP search engine), the data source will not be SIP enabled.

Please amend paragraph at page 21, line 24, as follows:

The SIP proxy server has recorded this information in association with the user's SIP identity and the user is assumed to have set their preferences to indicate that they are interested in transport. Accordingly, both the ETS software module and the SSS software module will record this information as if the user has used SIP for all of their sessions, including browsing, email and Instant messaging. All, ~~all~~ the information built up about the user's information sources and preferences will be accumulated in association with the user's SIP URI identifier – for example users.name@businessname.sip.

Please amend paragraph at page 26, line 28, as follows:

In ~~Step~~step 53, the SSS sends an initial search to several travel search sites, some of which have enhanced SIP search interfaces but some of which may be standard world-wide-web WWW servers.

Please amend paragraph beginning at page 26, line 32 through page 27, line 5, as follows:

In ~~Step~~step 54, the results returned are negative as the price cannot be met. The proxy server then may ask the user for more information or to revise the search and/or ask if the duration of the search could be extended so that search results could be returned at a later point, for example, 1 day later. In Figure 5, the user sends a response to the SIP server that it is possible to perform an extended search and for results to be provided 1 day later. The SSS then searches for hotels which do not have on-line booking facilities to determine email addresses and/or telephone numbers on travel web-sites and tourist information sites.

Please amend paragraph at page 27, line 7, as follows:

In ~~Step~~step 55, the SSS sends out email enquires in a format generated from the search request, and phones up hotels using text-speech and speech-to-text converters. The SSS obtains a near result and noting that the user is a member of at least one potentially relevant ~~organisation~~organization, provides this additional information to the hotel providing the near result to obtain a discount, for example 10%.

Please amend paragraph at page 30, line 19, as follows:

If the user has requests a search to locate an item for purchase, the SIP server could be provided with the user's financial information such as their credit card numbers etc., and any other information needed to make an automatic purchase of the requested item if the price conforms with the user's set preferences. As an example, consider a SIP server which polled a flight or holiday site for example, and located for example, a return flight to Cairo on the outward and inward dates the user has requested at a specific price. If the price is, for example, either below the user's "immediate purchase" limit or is the cheapest price of a set of search results returned within a given period of time for searching, the SIP server may effect an immediate purchase of the flight so that the price information is correct and the price does not change by the time the user receives the search results. It will be obvious to those skilled in the art that such an automated purchase scheme is not limited to the purchase of airline flights, but could be extended to any item or service offered for sale over a distributed computer system, including items which are under auction but which have an immediate purchase option.